



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. | | |
|--|-------------|------------------------|---------------------|------------------|--|--|
| 09/712,335 11/14/2000 | | Bjorn Markus Jakobsson | 30-6 8563 | | | |
| 7590 03/01/2005 | | | EXAM | EXAMINER | | |
| Ryan Mason & Lewis LLP | | | GURSHMAN, GRIGORY | | | |
| 90 Forest Avenue Locust Valley, NY 11560 | | | ART UNIT | PAPER NUMBER | | |
| Locust valley, | 111 11300 | | 2132 | | | |

DATE MAILED: 03/01/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

| Office Action Summary | | Application | n No. | Applicant(s) | | | | |
|--|--|--|--|---|--------------|--|--|--|
| | | 09/712,33 | 5 | JAKOBSSON ET AL. | | | | |
| | | Examiner | | Art Unit | | | | |
| | | Grigory G | urshman | 2132 | | | | |
| The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply | | | | | | | | |
| THE I - Exter after - If the - If NO - Failu Any r | ORTENED STATUTORY PERIOD FOR REF MAILING DATE OF THIS COMMUNICATION sions of time may be available under the provisions of 37 CFR SIX (6) MONTHS from the mailing date of this communication. period for reply specified above is less than thirty (30) days, a in period for reply is specified above, the maximum statutory perion to reply within the set or extended period for reply will, by state ply received by the Office later than three months after the managed patent term adjustment. See 37 CFR 1.704(b). | N. 1.136(a). In no eve reply within the statu od will apply and wil tute, cause the appli | nt, however, may a reply be tim tory minimum of thirty (30) day: I expire SIX (6) MONTHS from cation to become ABANDONE | nely filed s will be considered time the mailing date of this o D (35 U.S.C. § 133). | | | | |
| Status | • | · | | | | | | |
| 1)[🗆 | 1) Responsive to communication(s) filed on 10 December 2004. | | | | | | | |
| 2a)⊠ This action is FINAL . 2b)□ This action is non-final. | | | | | | | | |
| 3)□ | Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213. | | | | | | | |
| Disposition of Claims | | | | | | | | |
| 5) | | | | | | | | |
| Applicati | on Papers | | | | | | | |
| 10)⊠ | The specification is objected to by the Exam The drawing(s) filed on 10 December 2004 in Applicant may not request that any objection to the Replacement drawing sheet(s) including the continuous the oath or declaration is objected to by the | s/are: a) accidence and accidence accidence and accidence accidence and accidence and accidence accidence and accidence accidence accidence and accidence accidence and accidence | e held in abeyance. See ed if the drawing(s) is ob | e 37 CFR 1.85(a). jected to. See 37 C | FR 1.121(d). | | | |
| Priority ι | ınder 35 U.S.C. § 119 | | | | | | | |
| 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) All b) Some * c) None of: 1. Certified copies of the priority documents have been received. 2. Certified copies of the priority documents have been received in Application No. 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received. | | | | | | | | |
| Attachmen | | | 4) Interview Surrey | (PTO 413) | | | | |
| 2) Notic | e of References Cited (PTO-892) se of Draftsperson's Patent Drawing Review (PTO-948) mation Disclosure Statement(s) (PTO-1449 or PTO/SB/ sr No(s)/Mail Date | | 4) Interview Summary Paper No(s)/Mail D 5) Notice of Informal F 6) Other: | ate | O-152) | | | |

Application/Control Number: 09/712,335 Page 2

Art Unit: 2132

DETAILED ACTION

Response to Arguments

1. Referring to claim 15, the rejection under 35 USC § 101 is withdrawn in view of Applicant's amendment of the instant claim.

- 2. Referring to claims 1-15 Applicant argues that *prima facie* case of obviousness has not been established because Harrison and Akiyama collectively fail to teach an encryption key associated with a time interval. Examiner respectfully disagrees and points out that, according to Harrison, the key is generated for the particular set of files (see Fig.1) and the key is used in accordance with the preset time limit (see block 6). Therefore the encryption key is associated with the time interval, as recited in the instant claims.
- 3. Applicant further argues that rejection contains no objective evidence of record that would motivate one skilled in the art to combine the references applied. Examiner also disagrees and point out that one of ordinary skill in the art would have been motivated to have a software program configured to encrypt files with the key associated with the time interval and provide periodic updates including encryption keys associated with subsequent time intervals as taught in Akiyama for eliminating a risk of the unlawful decryption thereof by a third party (see Akiyama column 17, lines 66-68). The objective evidence is found in teachings of Harrison and Akiyama accordingly.
- 4. In response to applicant's argument that the examiner's conclusion of obviousness is based upon improper hindsight reasoning, it must be recognized that any judgment on obviousness is in a sense necessarily a reconstruction based upon hindsight

reasoning. But so long as it takes into account only knowledge which was within the level of ordinary skill at the time the claimed invention was made, and does not include knowledge gleaned only from the applicant's disclosure, such a reconstruction is proper. See *In re McLaughlin*, 443 F.2d 1392, 170 USPQ 209 (CCPA 1971).

5. Applicant points out some differences between prior art of record and the claimed invention. Examiner points out that none of the alleged differences are reflected in the independent claims 1, 14 and 15.

Drawings

6. The formal drawings filed on 12/10/2004 are accepted by examiner.

Claim Rejections - 35 USC § 103

- 7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
 - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 8. Claims 1-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Harrison (U.S. Patent No. 5.870.468) in view of Akiyama (U.S. Patent No. 5.784.464).
- 9. Referring to the instant claims Harrison discloses enhanced data privacy for portable computers (see abstract and Fig.4). Harrison teaches a method for protecting selected files in a portable computer system. With this invention a user selects a set of riles on a hard disk of the system for protection. This invention uses an encryption key,

a secret key and an algorithmic transform to protect the selected files. With this invention the selected files are encrypted with the encryption key, and two copies of the encryption key are scrambled, one with the secret key and one with the transform of the secret key (see abstract and Fig. 1).

10. Referring to the independent claims 1, 14 and 15, the limitation "configuring the software program ... such that one or more files generated by the program are ate least partially encrypted using a first cryptographic associated with a current time interval ..." is met by file protection agent software (18) depicted in Fig. 2, which encrypts files with encryption key. The key is generated for the particular set of files (see Fig.1) and the key is used in accordance with the preset time limit (see block 6). Therefore the encryption key is associated with the time interval, as recited in the instant claims.

While Harrison teaches the use of a second encryption key, he does not explicitly teach providing periodic updates of the encryption key associated with a subsequent time interval.

Referring to the instant claims, Akiyama teaches that the contents of a variety of titles that are managed by the service provider system 1 are encrypted beforehand with the respective keys KG.sub.1j. It is required that the encryption be re-performed by periodically updating the title keys KG.sub.1. As a premise of this process of FIG. 14, it is assumed that the second master key (KM2) 185 of the key management unit 18 is absolutely identical with the second master key (KM2) 163 of the key update processing unit 16. Further, the title key KG.sub.1j used once is to be disposed of without reusing it, and, hence, the second master keys 163, 185 used for generating the title key

KG.sub.1j are changed each time the key is updated. In the next step S45, the key update timer 17 waits a certain time limit (e.g., after midnight on every Sunday) and then changes over the respective SW1, SW2, SW4, SW5 (see column 17, lines 63-67 through column 18, lines 1-20). Therefore, at the time the invention was made, it would have been obvious to one of ordinary skill in the art to have a software program configured to encrypt files with the key associated with the time interval of Harrison and provide periodic updates including encryption keys associated with subsequent time intervals as taught in Akiyama. One of ordinary skill in the art would have been motivated to have a software program configured to encrypt files with the key associated with the time interval and provide periodic updates including encryption keys associated with subsequent time intervals as taught in Akiyama for eliminating a risk of the unlawful decryption thereof by a third party (see Akiyama column 17, lines 66-68).

- 11. Referring to claim 2, Harrison shows that files encrypted with the first encryption key are decryptable by programs having a corresponding decryption key (see Fig. 6).
- 12. Referring to claim 4, Harrison also teaches the use of a secret key, which meets the limitation "symmetric cryptographic key".
- 13. Referring to claim 5, Akiyama teaches that one encryption key is produces from the second key by using the one-way function (see column 17, keys generated from the master key).
- 14. Referring to claim 7, Harrison shows that the time interval defined by the idle timer (33) is uniquely associated with the encryption key (3) see Fig. 5.

15. Referring to claim 10, Harrison teaches that the files are encrypted with the interval of the idle timer, thereby providing the compatibility of the versions of encryption keys as shown in Fig. 6.

- 16. Referring to claim 11, Akiyama shows the use of network for distributing content for the server to the client (see Fig.2)
- 17. Referring to claims 12 and 13, it is well known in the art to provide software updates in an automatic manner as well as to use identifiers associated with the number of legitimate copies. One o of ordinary skill in the art would have been motivated to provide software updates in an automatic manner as well as to use identifiers associated with the number of legitimate copies in order to avoid the use of software by unauthorized parties.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Grigory Gurshman whose telephone number is (571)272-3803. The examiner can normally be reached on 9 AM-5:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gilberto Barron can be reached on (571)272-3799. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Grigory Gurshman Examiner Art Unit 2132

GG

GILBERTO BARRON 3YC.
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2100